

In the Claims:

The following listing replaces all prior listing of claims in the application.

Listing of Claims:

1-23. (cancelled)

24. (Previously presented) A locating arrangement comprising a plurality of ultrasonic transmitters arranged along a path, wherein the distance between adjacent ultrasonic transmitters is greater than one meter, and wherein at least three radiation receivers arranged along the path.

25. (Previously presented) The locating arrangement as claimed in claim 24 wherein the transmitters are arranged at mutually uniform distances between mutually adjacent transmitters, the uniform distances in the range of from one meter to three meters and wherein the transmitters are arranged along a straight section.

26. (Previously presented) The locating arrangement as claimed in claim 25 wherein the uniform distances are approximately 1.5 meters to two meters.

27. (Previously presented) The locating arrangement as claimed in claim 24 wherein the transmitters are arranged along an aisle.

28. (Previously presented) The locating arrangement as claimed in claim 27 wherein the transmitters are arranged along an aisle in a factory building.

29. (Previously presented) The locating arrangement as claimed in claim 28 wherein semiconductor wafers or other substrates for integrated electronic circuits being processed in the factory building.

30. (Previously presented) The locating arrangement as claimed in claim 24 further comprising a drive unit operable to drive the transmitters based on a pulsed operating mode in which ultrasonic pulses are transmitted between transmission pauses.

31. (Previously presented) The locating arrangement as claimed in claim 24 further comprising a drive unit operable to work cyclically and generate for the transmitters drive signals that instigate a transmission of ultrasonic pulses, wherein a cycle of the drive unit comprises at least two sections in each of which a different portion of the transmitters is driven,

and wherein the drive unit comprises a plurality of group drive units that generate the drive signals for a plurality of transmitters depending on an input signal.

32. (Previously presented) The locating arrangement as claimed in claim 31, further comprising at least three further US transmitters arranged along a further path.

33. (Previously presented) The locating arrangement as claimed in claim 32 wherein the further US transmitters are arranged along a further straight section and at mutually identical distances between mutually adjacent transmitters, wherein the two paths lie parallel or transversely with respect to one another.

34. (Previously presented) The locating arrangement as claimed in claim 32, wherein the path and the further path are arranged parallel to one another, and wherein one path, in the event of a parallel displacement, overlaps the other path completely or over at least 50 percent of a length of the further path.

35. (Previously presented) The locating arrangement as claimed in claim 34, wherein at least two transmitters on different paths transmit simultaneously, wherein more than one transmitter lies between the two transmitters after a parallel displacement.

36. (Previously presented) The locating arrangement as claimed in claim 34 wherein a region into which no ultrasonic signal of the transmitters or only a greatly attenuated ultrasonic signal penetrates lies between the two paths.

37. (Previously presented) The locating arrangement as claimed in claim 31 further comprising at least three further US transmitters arranged along a straight main path at mutually identical distances between mutually adjacent transmitters, wherein the main

path lies transversely with respect to at least two secondary paths., in particular at an angle of 90 degrees.

38. (Previously presented) The locating arrangement as claimed in claim 37 wherein the main path lies at angle of 90 degrees with respect to the at least two secondary paths.

39. (Previously presented) The locating arrangement as claimed in claim 37 wherein the at least three radiation receivers are strung along a straight path at mutually identical distances between mutually adjacent radiation receivers, wherein the distance between adjacent receivers is at least twice as large as the distance between adjacent transmitters, and the distance between adjacent receivers is less than five times the distance between the transmitters.

40. (Previously presented) The locating arrangement as claimed in claim 39, wherein at the distance between mutually adjacent receivers comprises at least one of a distance greater than three meters and less than seven meters, a distance between mutually adjacent receivers greater than four meters and less than 5.5 meters, a distance between mutually adjacent receivers of 4.8 meters, or wherein the receivers are arranged on same sections as the transmitters, wherein one receiver is arranged between two transmitters at the same distance from the two transmitters.

41. (Previously presented) The locating arrangement as claimed in claim 39, further comprising an evaluation unit operable to determine a location with a coarse resolution depending on the reception signal at the receivers, wherein the evaluation unit is further operable to carry out a finer spatial resolution relative to the coarse resolution based on a propagation time measurement determined with the aid of at least two transmitters and wherein the receivers are operable to receive data from the objects to be located.

42. (Previously presented) The locating arrangement as claimed in claim 40 further comprising a plurality of connection units at each of which a plurality of antenna modules are operated, and an antenna module containing a reception antenna and a plurality of transmitters, wherein the connection units are connected via a local data transmission network.

43. (Previously presented) The locating arrangement as claimed in claim 40 further comprising at least 500 identification units that have mutually different identifications and that are arranged in an acoustic irradiation range of the transmitters, wherein the identification units are fixed to a receptacle container for a plurality of substrates for integrated circuits.

44. (Previously presented) An identification unit comprising
a memory unit operable to store an identification that distinguishes the identification unit from other identically constructed identification units,
an ultrasonic receiver,
a radiation transmitter,
a radiation receiver, and
a control unit operable to carry out an ultrasound propagation time measurement depending on a synchronization signal received by the radiation receiver and operable to transmit the result with the aid of the radiation transmitter, wherein at least one luminous unit is driven via the radiation receiver.

45. (Previously presented) The identification unit as claimed in claim 44, further comprising a bistable character display unit operable to display a content to be represented even after an operating voltage has been switched off.

46. (Previously presented) A location determining method comprising:
constructing a locating arrangement comprising a plurality of ultrasonic transmitters along at least one path;
constructing at least two radiation receivers or two radiation transmitters that receive radiation from at least one region irradiated with sound by a transmitter;
introducing at least one identification unit into a region irradiated with sound by at least two transmitters;
carrying out an ultrasonic propagation time measurement from at least two transmitters to the identification unit and determining at least one propagation time datum;

determining a fine position of the identification unit depending on the propagation time datum;

determining a coarse position of the identification unit using at least two radiation transmitters or radiation receivers ; and

combining the fine position and the coarse position to form a location datum.

47. (Previously presented) The method as claimed in claim 46 further comprising:

carrying out the propagation time measurement in the identification unit;

communicating the propagation time datum from the identification unit via a radiation receiver to an evaluation unit that determines the location datum; and

determining the coarse position based on a reception intensity upon reception of the propagation time datum at at least two radiation receivers.

48. (Previously presented) The method as claimed in claim 46 further comprising using at least one of the locating arrangement as claimed in claim 24 or the identification unit as claimed in claim 44.

49. (Previously presented) The method as claimed in one of claims 46 further comprising:

determining the fine position by trigonometrical calculations in a plane which contains a section in which the ultrasonic transmitters are arranged and which contains the identification unit; and

determining a fine position by one spatial coordinate.

50. (Previously presented) A batch box localization system comprising a locating arrangement operable to detect transport paths for a plurality of batch boxes between a plurality of manufacturing installations and locates the batch boxes with an accuracy of less than two meters, wherein the locating arrangement as claimed in claim 24 or an identification unit as claimed in claim 44 is used.

51. (Previously presented) The batch box localization system as claimed in claim 50 further comprising a communication system that outputs at least one of manufacturing data or transport data to output units fixed to the batch boxes.

52. (Previously presented) The batch box localization system as claimed in claim 50 further comprising a communication system that outputs manufacturing data and transport data to output units fixed to the batch boxes.